A Flow Chart for Array-based Detection of Gene Expression

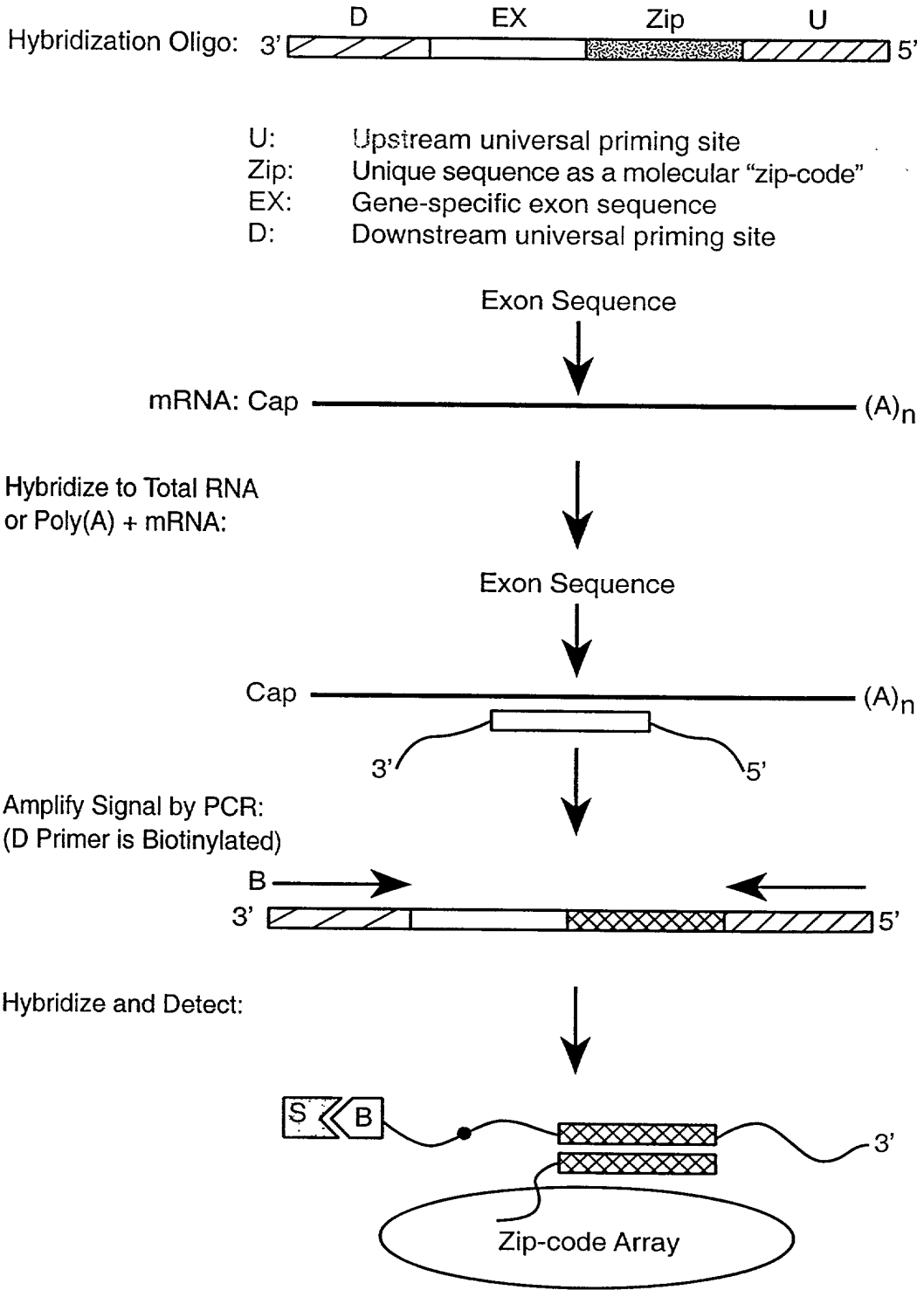


FIG._1

A Flow Chart for Array-based Detection of RNA Alternative Splicing

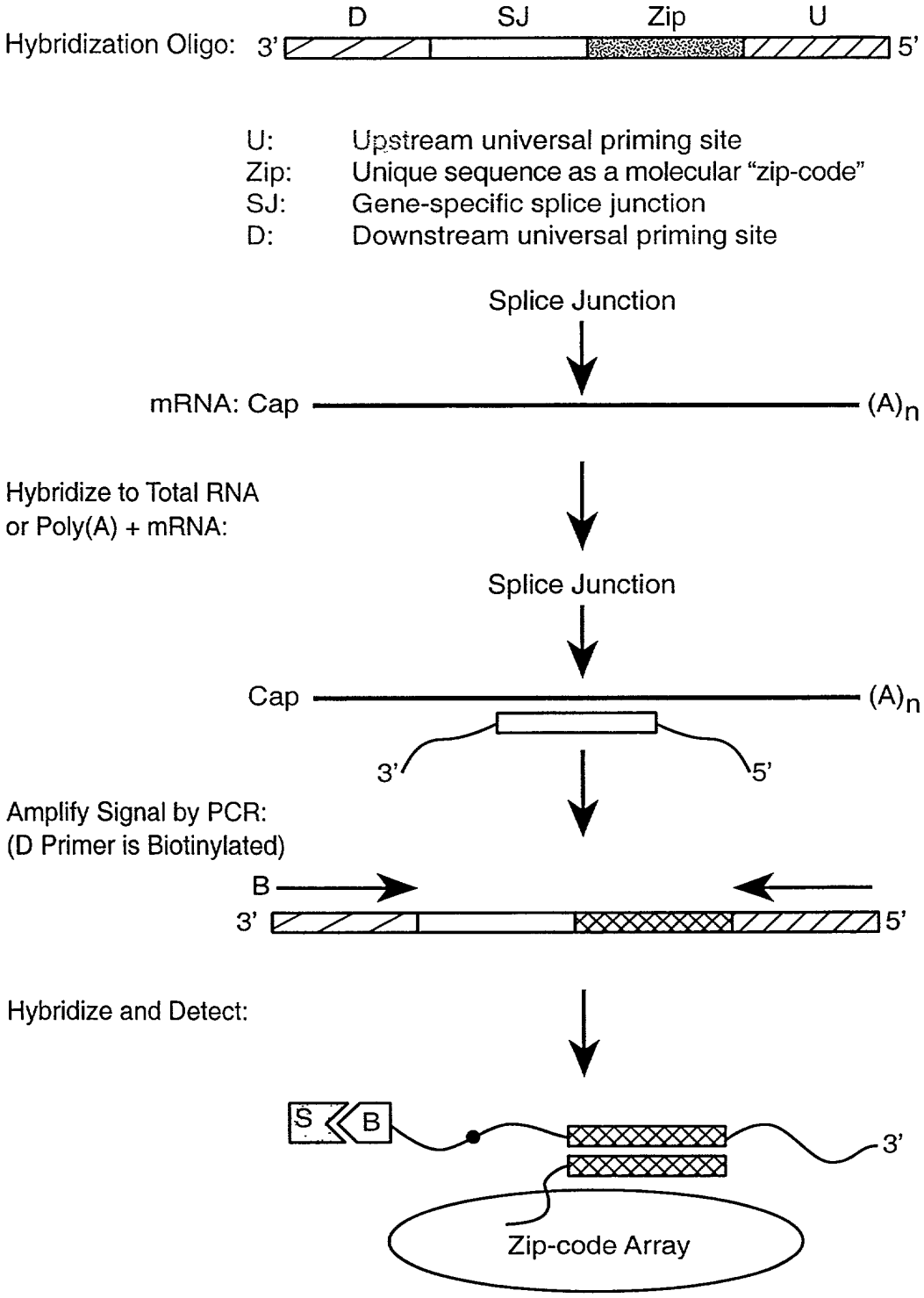
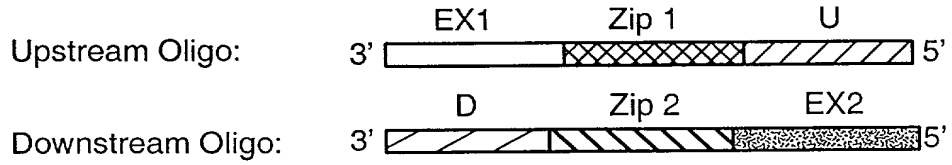


FIG._2

Genome-wide Gene Expression Profiling Using Oligo-ligation Strategy



U: Upstream universal priming site
Zip 1: Unique sequence as a molecular "zip-code"
Zip 2: A different zip-code
EX1: Gene-specific exon sequence
EX2: Gene-specific exon sequence
D: Downstream universal priming site

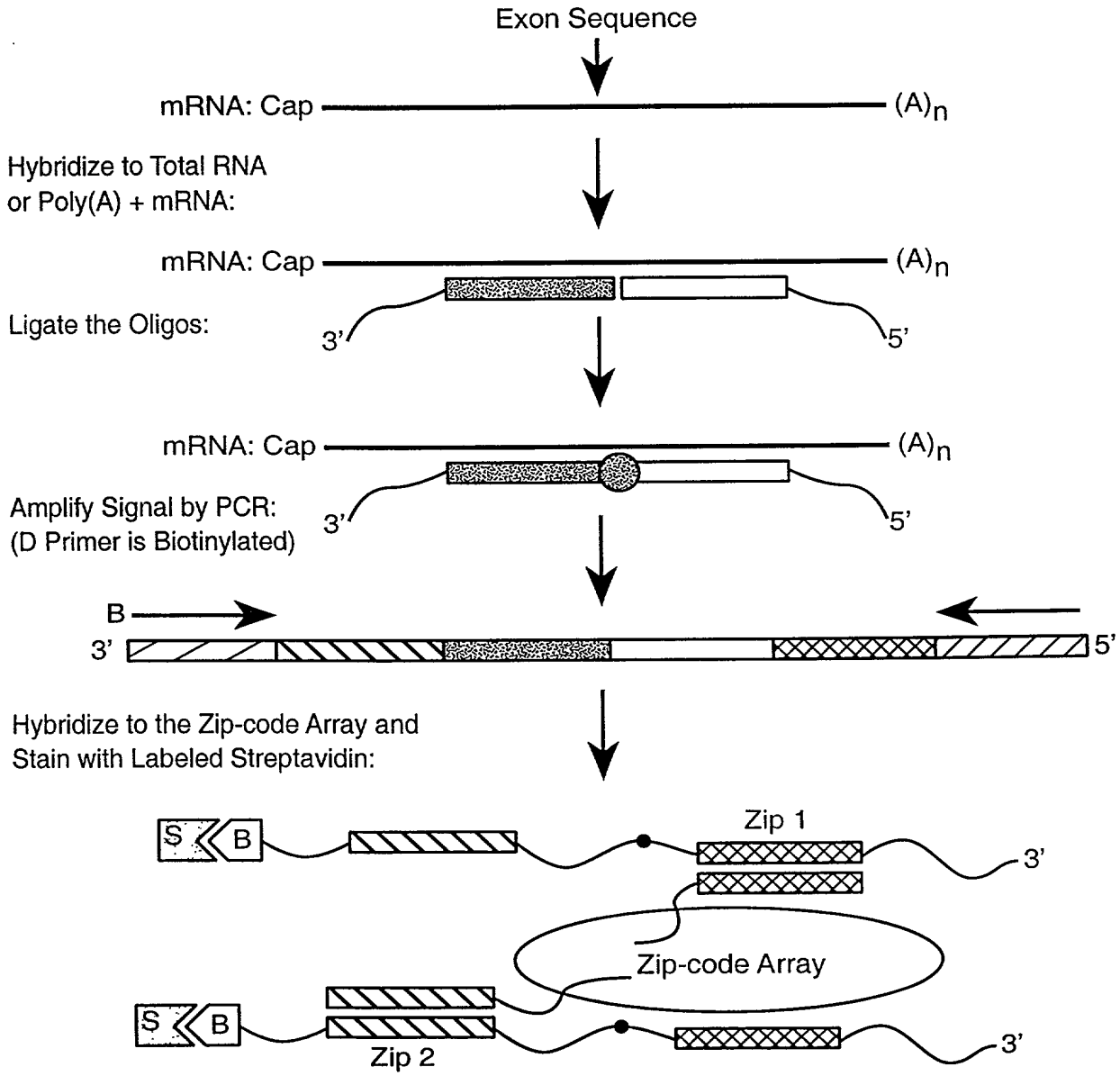


FIG._3

Genome-wide RNA Alternative Splicing Monitoring Using Oligo-Ligation Strategy

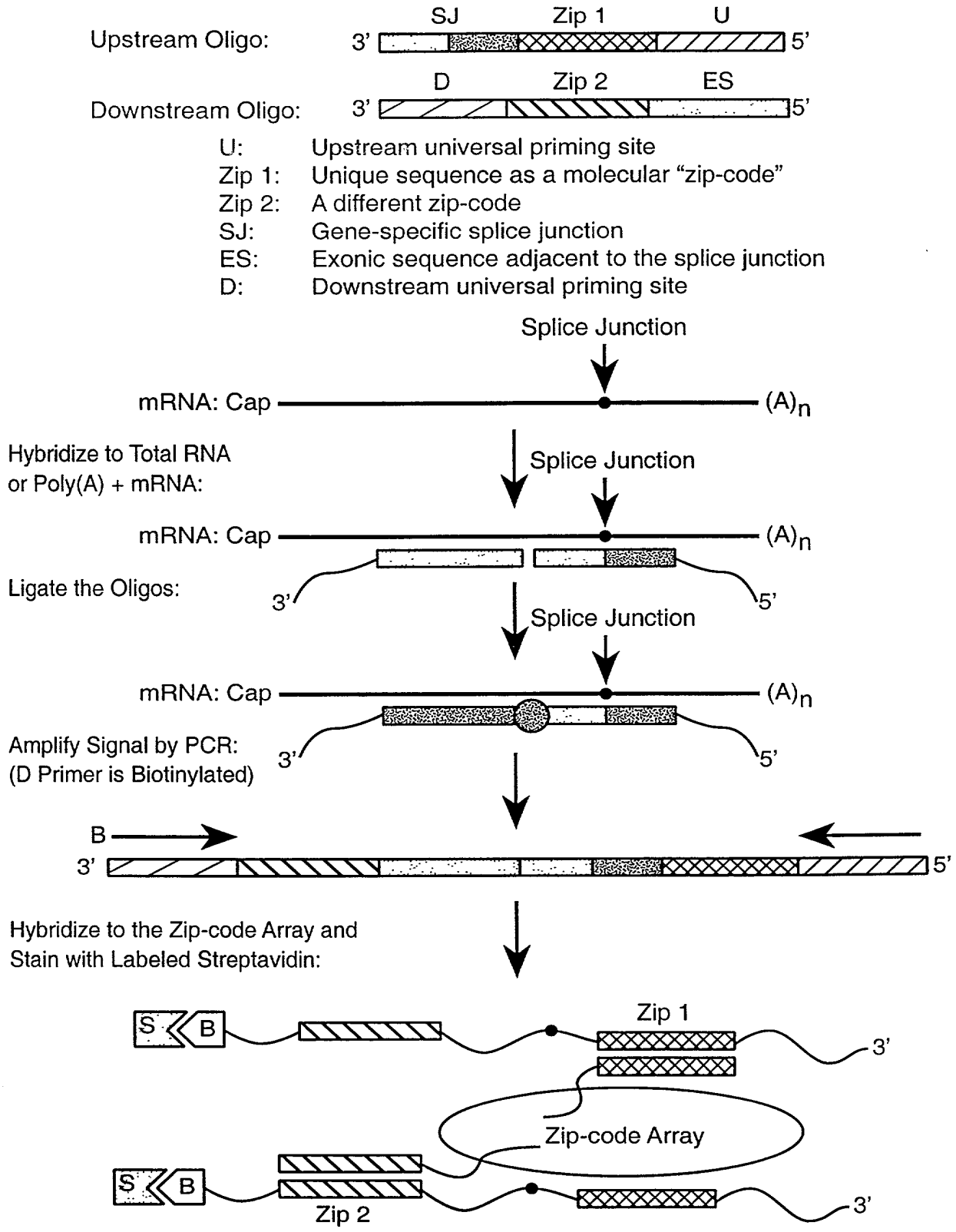


FIG._4

Direct Genotyping Using a Whole-genome Oligo-ligation Strategy

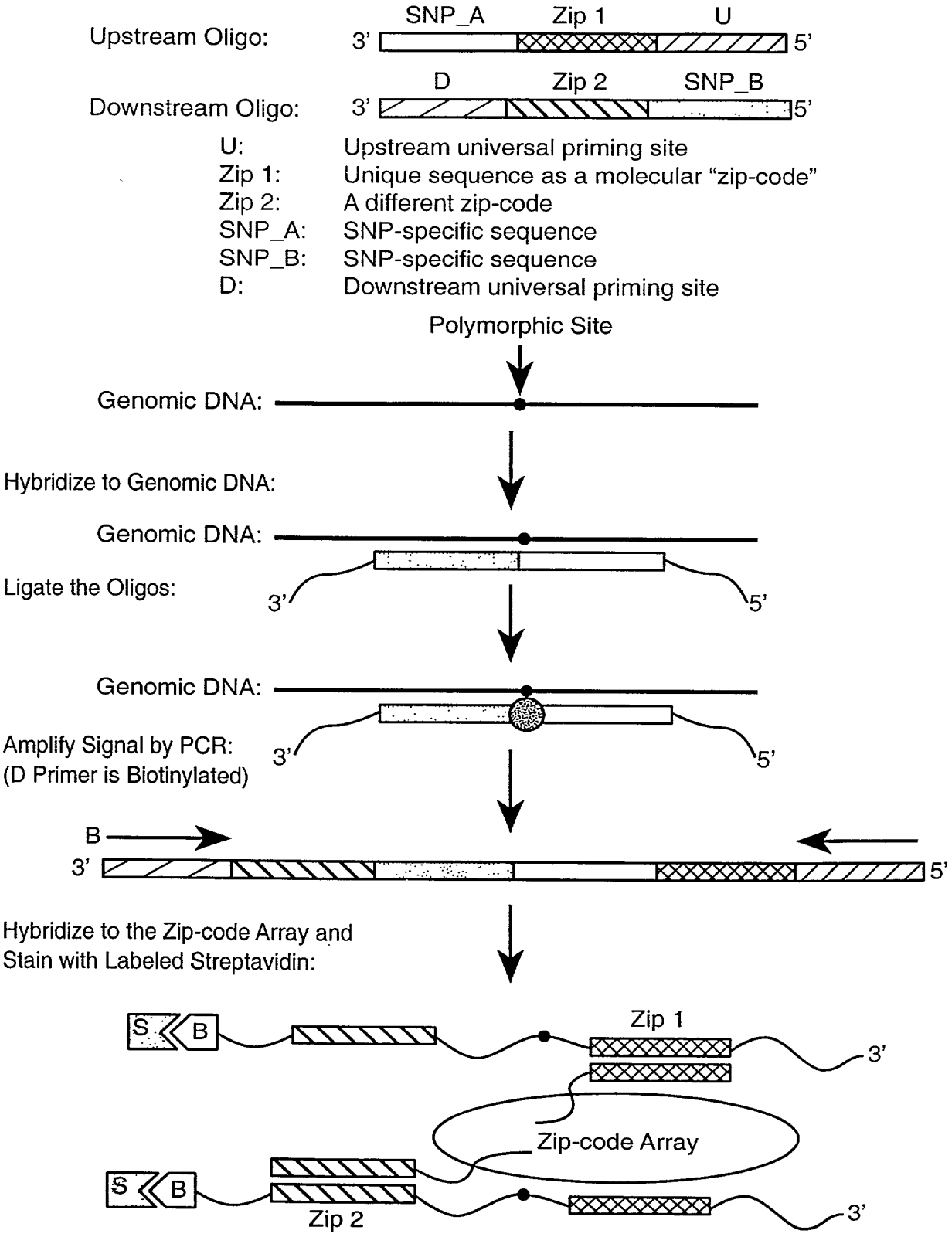


FIG._5

Whole-genome Oligo-ligation Strategy

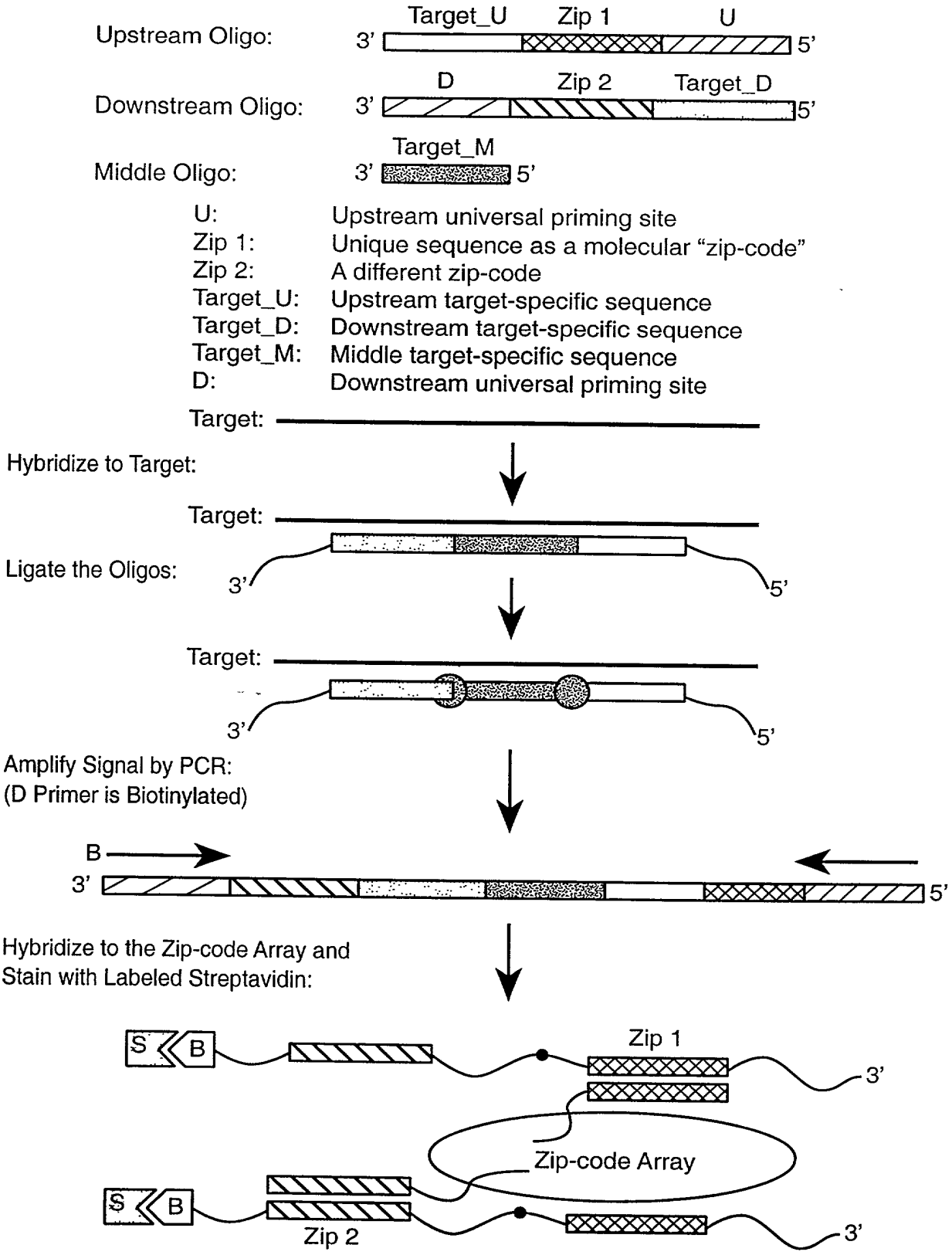


FIG._6

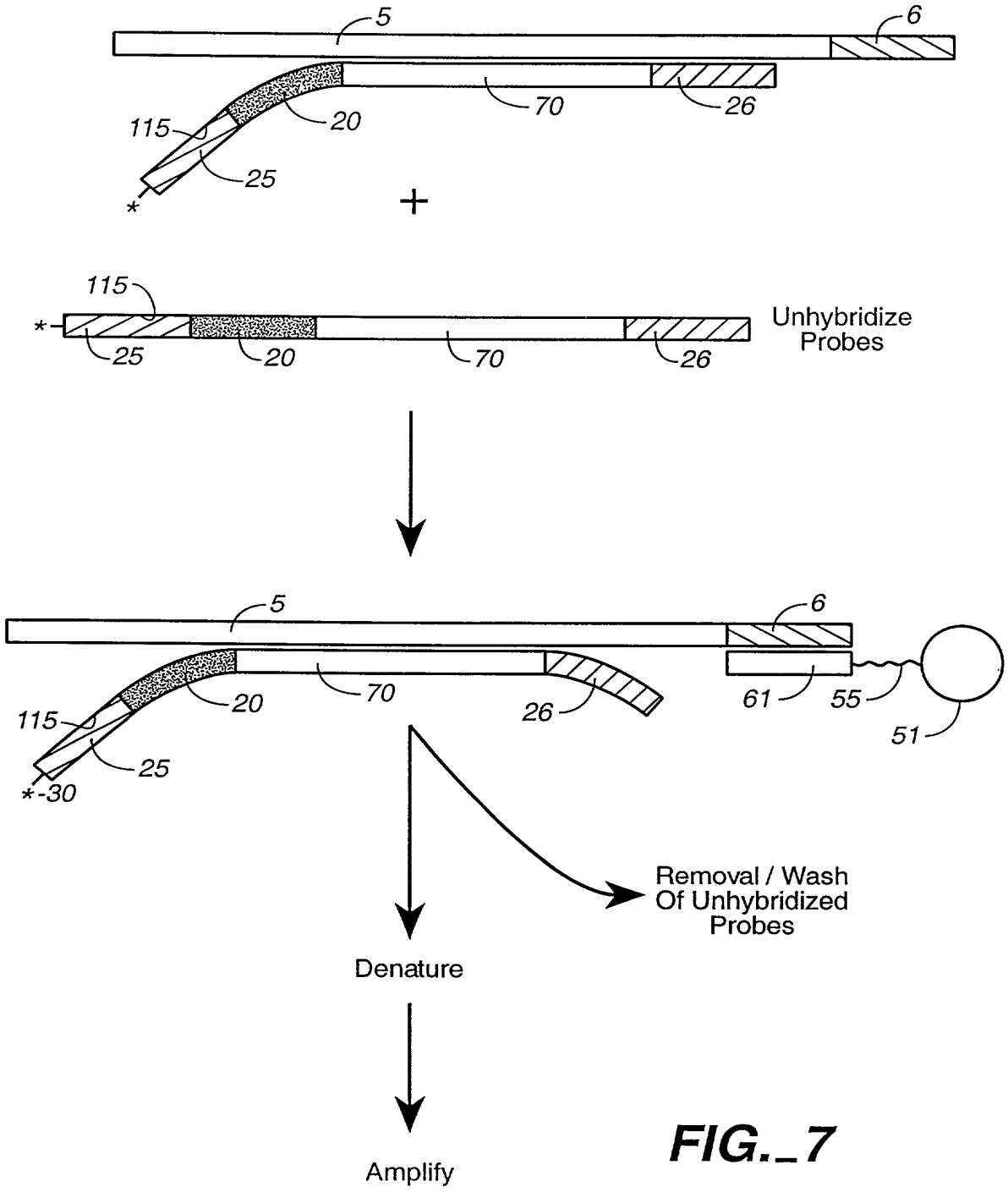

5
6
115
20
70
26
25
*
+
115
*
25
20
70
26
Unhybridize Probes
5
6
115
20
70
26
61
55
51
25
*-30
Removal / Wash Of Unhybridized Probes
Denature
Amplify

FIG._7

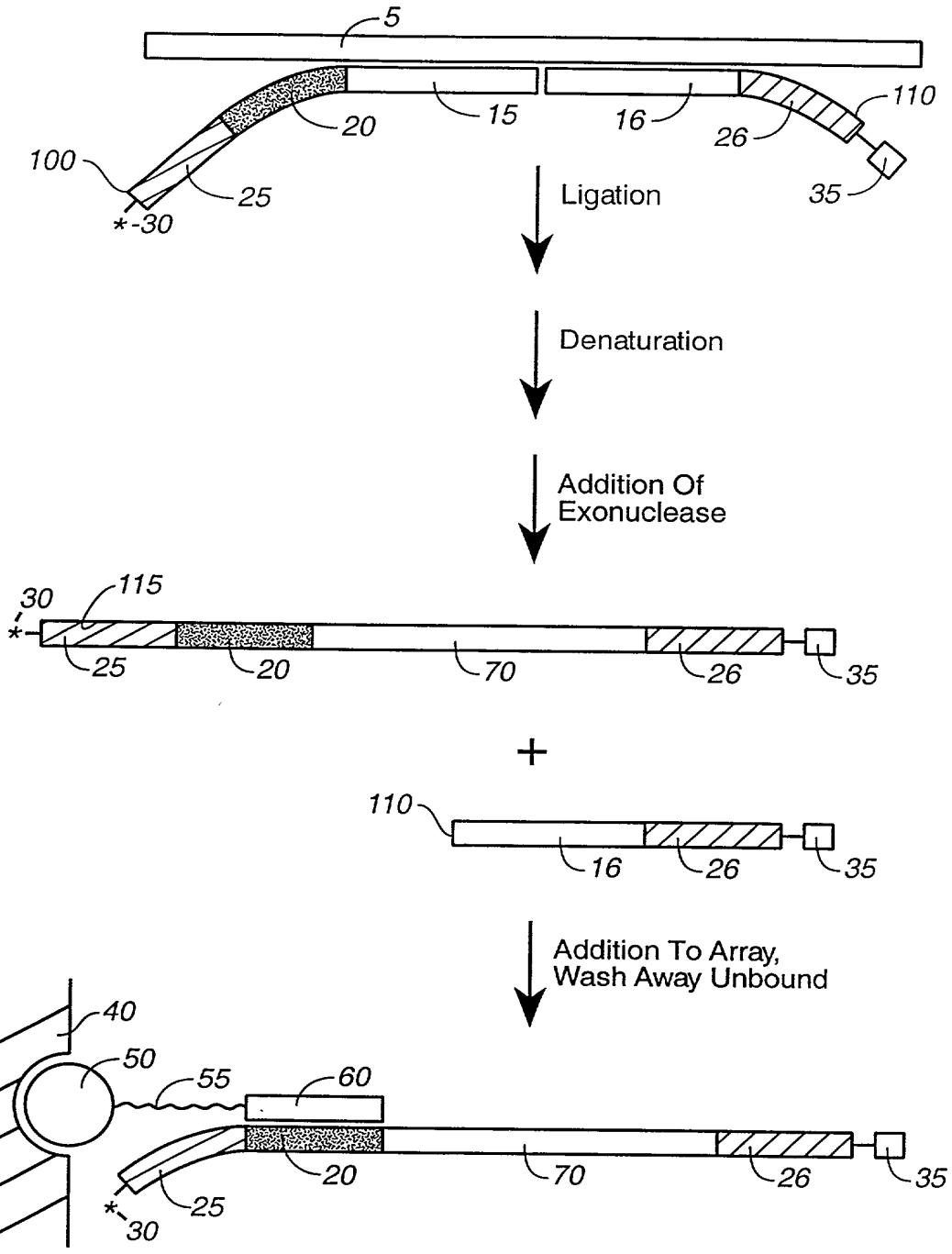

5
110
20
15
16
26
100
25
35
*-30
Ligation
Denaturation
Addition Of
Exonuclease
30
115
25
20
70
26
35
+
110
16
26
35
Addition To Array,
Wash Away Unbound
40
50
55
60
20
70
26
35
25
*-30

FIG._8

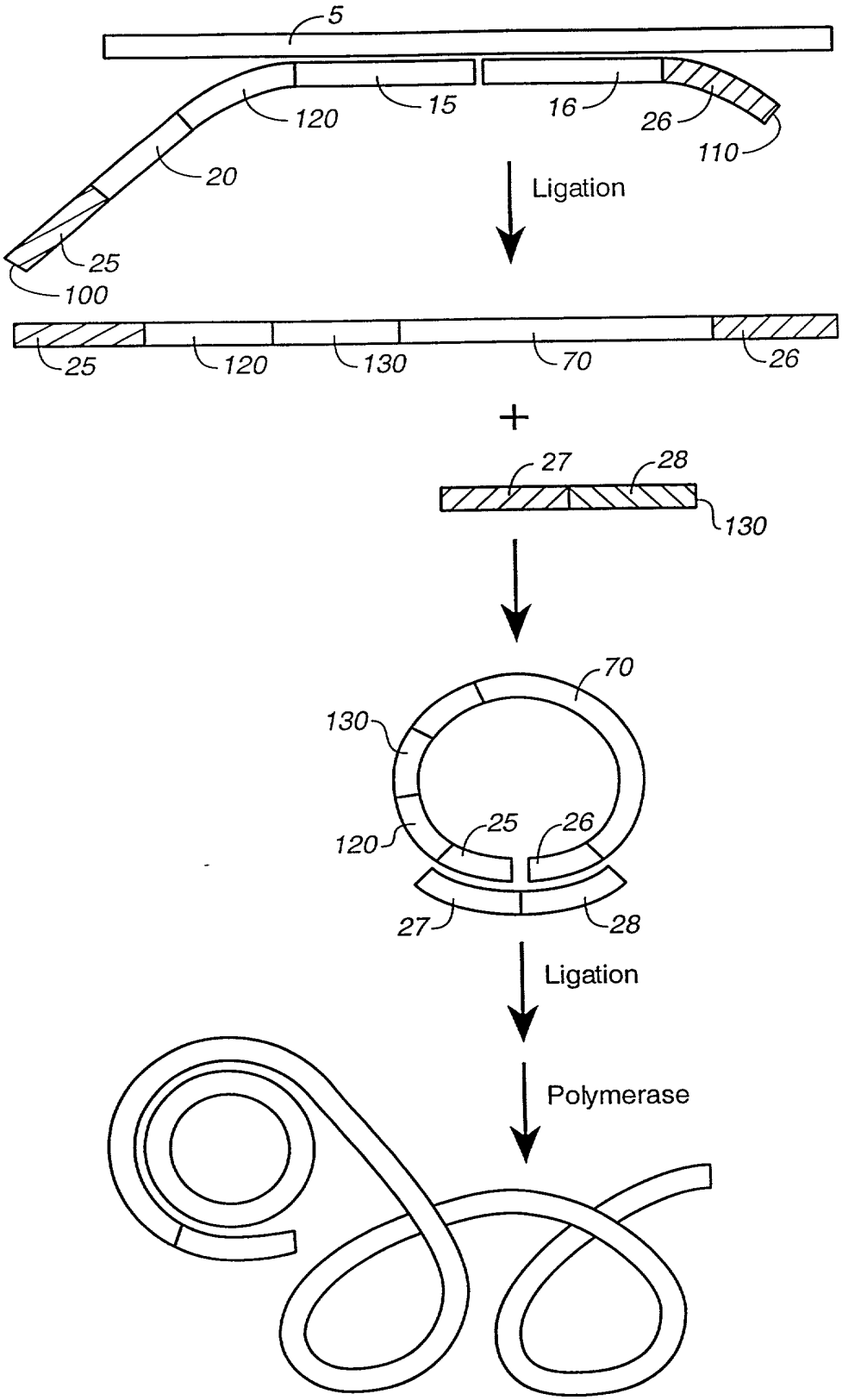

5
120
15
16
26
110
20
Ligation
25
100
25
120
130
70
26
+
27
28
130
70
130
120
25
26
27
28
Ligation
Polymerase

FIG._9

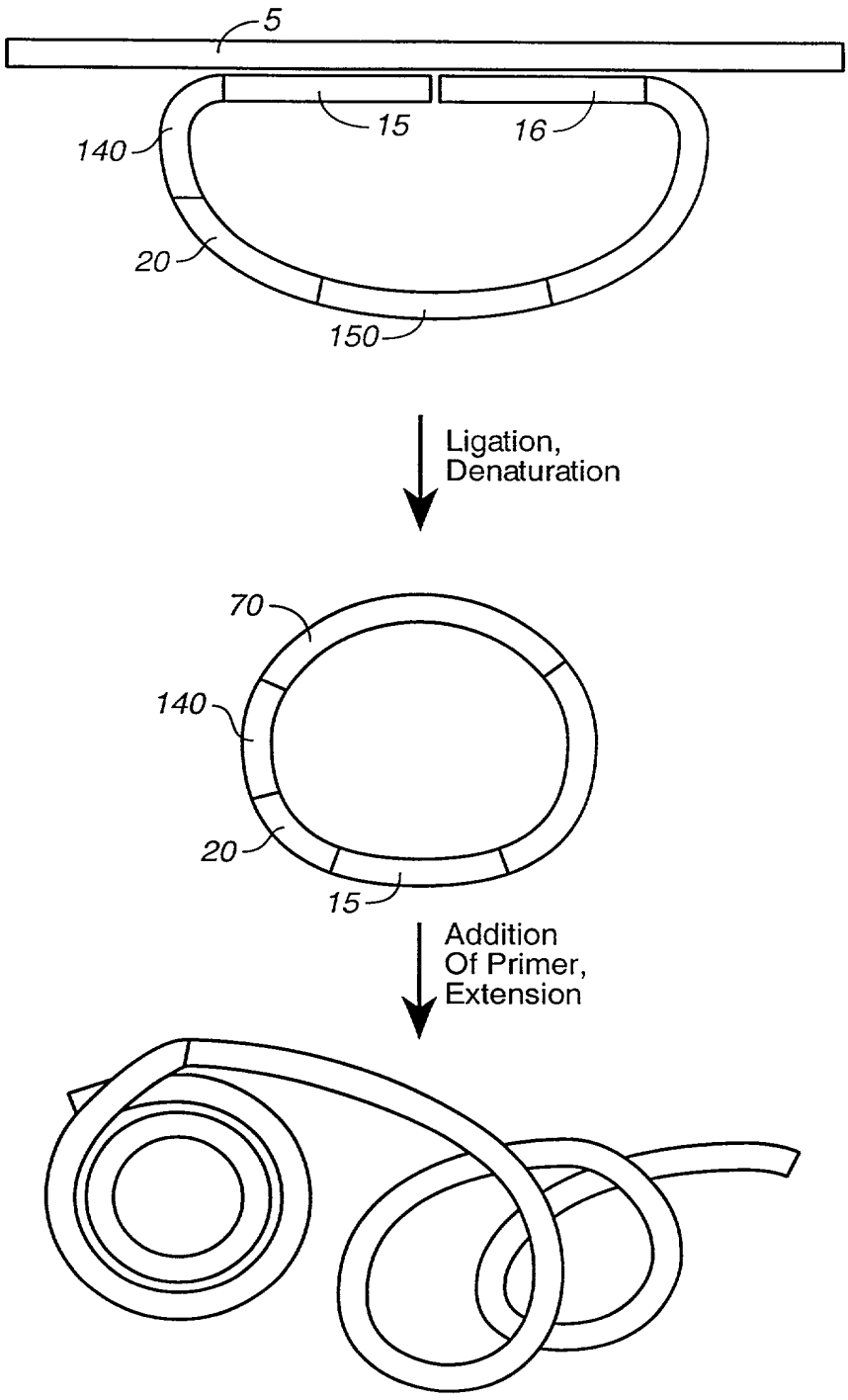
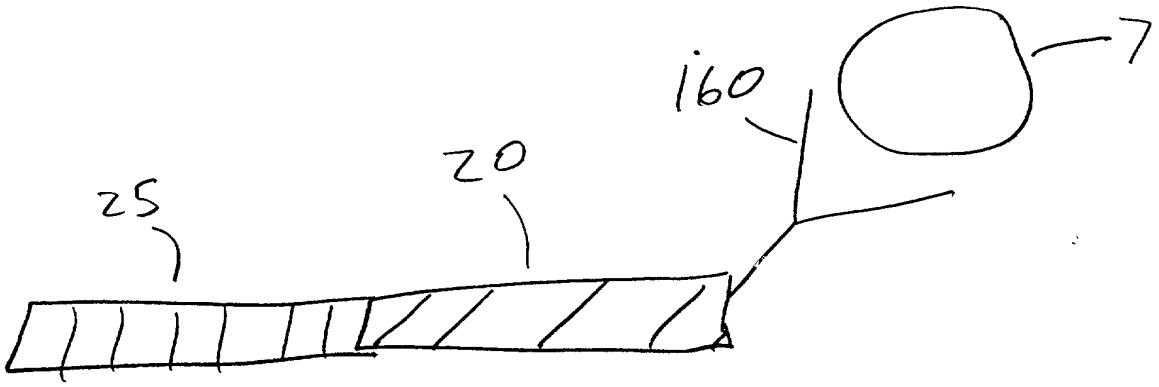
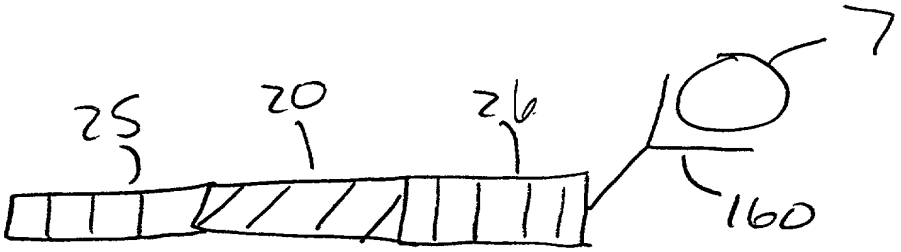

5
15
16
140
20
150
Ligation,
Denaturation
70
140
20
15
Addition
Of Primer,
Extension

FIG._10



A



B

Figure 11

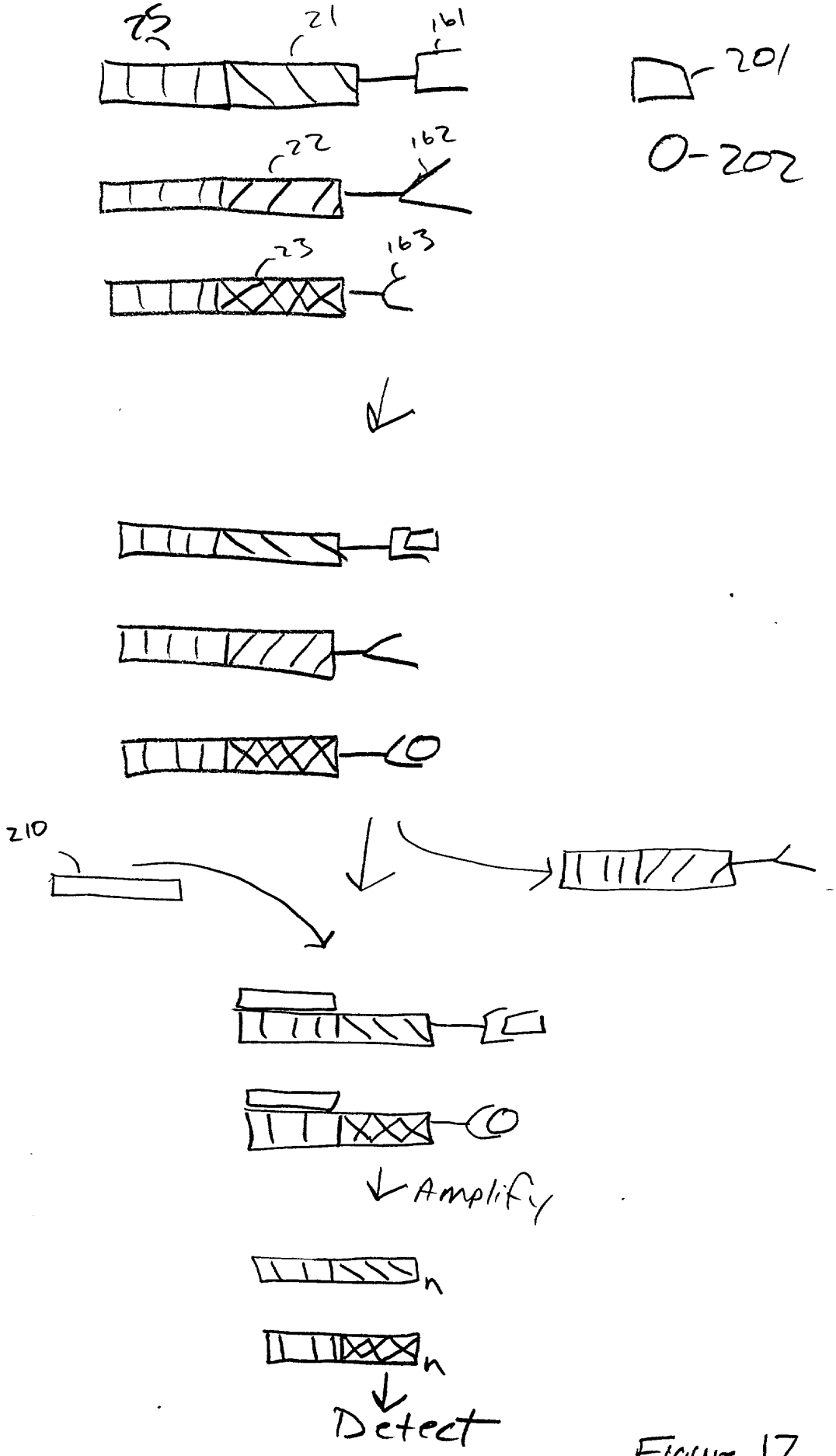


Figure 12